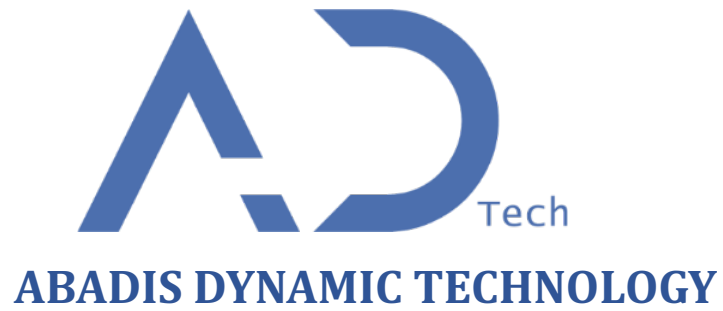


To:

Date: July 6, 2024



Commercial offer & Technical Specification for Micro duct Production Line

(Diameter: 8/5, 14/10 mm)



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☑ Microduct Pipe Specification
① PE(100%PE Raw materials) Layer

No.	Pipe Size OD/ID	Outer Diameter mm	Inner Diameter mm	Thickness mm	Inner Surface
1	8/5	8mm	5mm	1.6mm	Ribbed inner surface
2	14/10	14mm	10mm	2.0mm	Ribbed inner surface

② Internal Silicon Layer (97%PE +3% Silicon Raw materials), thickness :0.2mm
PART1 QUOTATIONLIST

(1) Delivery time: 90 days

(2) Package: Soft package suitable for land transport

(3) Warranty time: one year

(4) Remark:

The Normal Electric power supply: Three phase four wire 380V, 50HZ, If your power different, There will be extra 5% cost in basis of the current total price.

NOTES: The production speed of the above configuration is 20m/min for 14mm/10mm Microduct pipe production.

PART2 MACHINE SETCOMPOSITION

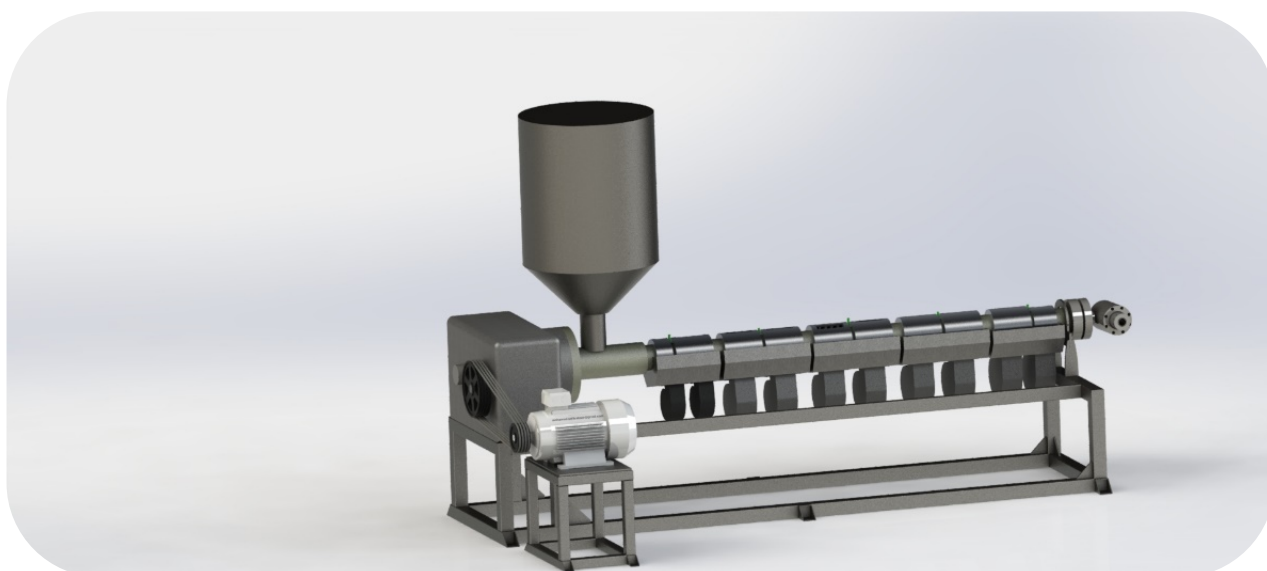
NO.	Machine Set Composition	Qty.
1	high speed Extruder for HDPE (55kw)	1 set
2	Stripes Extruder (1.5KW)	1set
3	Automatic Loader	2sets

4	Hot Air Dryer	1set/1set
5	High Speed Co-extrusion Precision microduct die head moulds	1 set
6	Specialized High Speed Calibrator	3units
7	Vacuum Calibrating Cooling Stand(6000mmx2)	2 sets
8	Water Cooling Tank(6000mmx2)	2 sets
9	Dehydration drying unit	1 set
10	High-speed Belt Haul-off Machine	1 set
11	Coiler	2 sets
12	Delta PLC programmable computer control system	1 set

PART3 DETAILED INFORMATION OF EACH PART

1. HDPE extruder

1set



2) Screw

—— Mode	“Abadis Made” Latest five stage high efficient screw, Using the special patented designed 5 section large L/D structure screw for production of HDPE, which has largely improved the plasticizing & mixing effect.
—— Advantages	Under the same energy consumption condition, the output can be increased about 30% at certain unit time.
—— Diameter	65mm
—— Rotating speed	10-130rpm

3) Barrel

—— Mode	“Abadis Made” Two stages, with forced feeding function, insuring of the solid materials transport efficiency.
—— Heating control zones	6 zone
—— Temperature control mode	Programmable Delta PLC high precision, automatic temperature control
—— Heating mode	High efficient ceramic heater
—— Heating power	4KW × 6
—— Cooling mode	Double vortex powerful air cooling, spiral grooves designed on the barrel surface, for better cooling effect and energy consumption saving
—— Cooling power	0.25kW × 12

4) Reducer

—— Gear mode	Spiral gear
—— Gear material	20CrMnTi low carbon alloy structure steel
—— Gear surface treatment	gear surface carbonization quenching
—— Bearing	Big thrust spherical roller bearing
—— Lubrication system	Immersed lubrication
—— Cooling system	water circulating forced cooling

6) Electric box

—— Control mode	“China Made” Delta PLC
—— Cooling mode	Fans Cooling

7) Drive motor

—— Motor Type	“Iran Made” Electrogen A.C Motor 55 Kw
—— Speed Governing mode	Frequency speed governing
—— Frequency Inverter	“China Made” Delta Brand C2000
—— Power	55KW

2. Marking line extruder

1set

——Motor	1.5KW “Iran Made” Electrogen motor
——Frequency Inverter	“China Made” Delta Brand
—— Driver Brand	2.2Kw “China Made” Delta Brand C2000
——Temperature control	“China Made” Delta PLC control temperature, with independent fans cooling in each heating zones
——Heating control zones	4 zone
——Reducer	“China Made” Spiral Reducer
——Max. Rotating speed	37rpm
——Heating Power	1Kw × 4

3. Automatic Loader

2sets

——Mode	“Iran Made” Milan Brand
——Loading Capacity	500Kgs/h
——Feeding Hopper Capacity	50L
——ID of Feeding Pipe	ø38mm
——Motor Power	1Kw
——Main Body Dimension	36x32x59mm

4. Hot Air Dryer

1set/1set

——Max. Temp.	200°C
——Features	<p>① High performance hot air diffusing device with uniform dispersion is used to keep drying temperature uniform and improve drying efficiency;</p> <p>② Electric heating tube is made of SS304 tube, which has a long service life and no peel on the surface layer and will not pollute raw material.</p> <p>③ Inside of hopper and part contacted material are all made of stainless steel.</p>

5. HDPE Silicone Core Co-extrusion Composite Pipe Die Head

1set

——Die head Brand	Abadis
——Materials	<p>40Cr High quality moulds steel, processed by imported CNC machinery precision manufacturing. Mandrel & Mouth die with Chrome Plating, for purpose:</p> <p>① Reduced melting-flow friction coefficient,</p> <p>② The tooling clearance and maintenance is easier</p> <p>③ Lengthen the lifespan of the mouth die and mandrel</p>

——Production scope	8/5, 14/10 mm
——Heating mode	High efficient Ceramic heater
——Grooves forming	with inner ribbed surface
——Pressure Sensor	Melting Pressure Sensor equipped

6. High speed PE Combined Multi-sheet water baths calibrator 1set

——Calibrator Brand	Abadis
——Production scope	8/5, 14/10 mm
——Features	It is developed by our own company, with unique technology in Iran, with structure of multi-sheet overlapped water baths combined high speed calibrator.



7. Calibrating Vacuum Cooling Tank 1set

—— Vacuum Cooling Tank Brand	Abadis
——Length	6000mm x 2
——Cooling mode	Whole journey water immersion cooling, which make the pipe and water with full connecting, to get the perfect cooling effect.
——Cooling water control system	Auto water drainage and supply
——Water temperature control	Auto, with temperature display

8. Water immersion Water cooling stand

2sets

——Cooling mode

Whole journey water immersion cooling, which make the pipe and water with full connecting, to get the perfect cooling effect.

——Length

6000mmx2

9. Dehydration Drying Unit

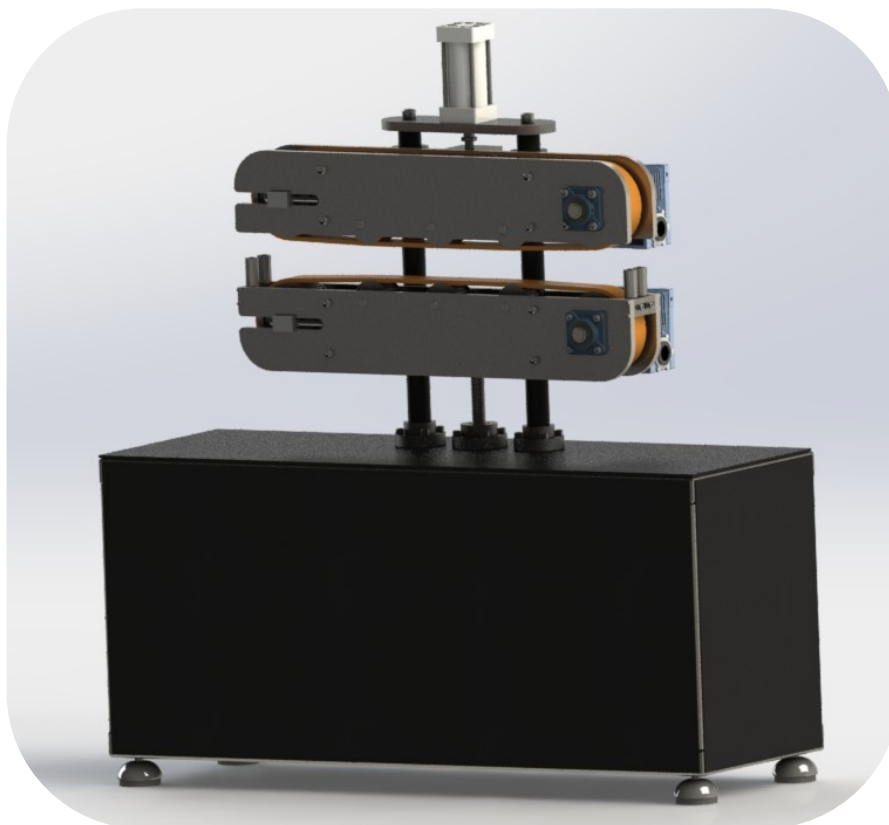
1set

——Drying mode

Compressed air drying

10. high speed belt haul-off machine

1set



——Type

TE-600

——Motor

“China Made” Delta 1KW Servo Motor x2

——Encoder Brand

“Korea Made” Autonics Brand

——Driver Brand

1 Kw “China Made” Delta Brand A2

- Belt type
- Clamping mode
- Features

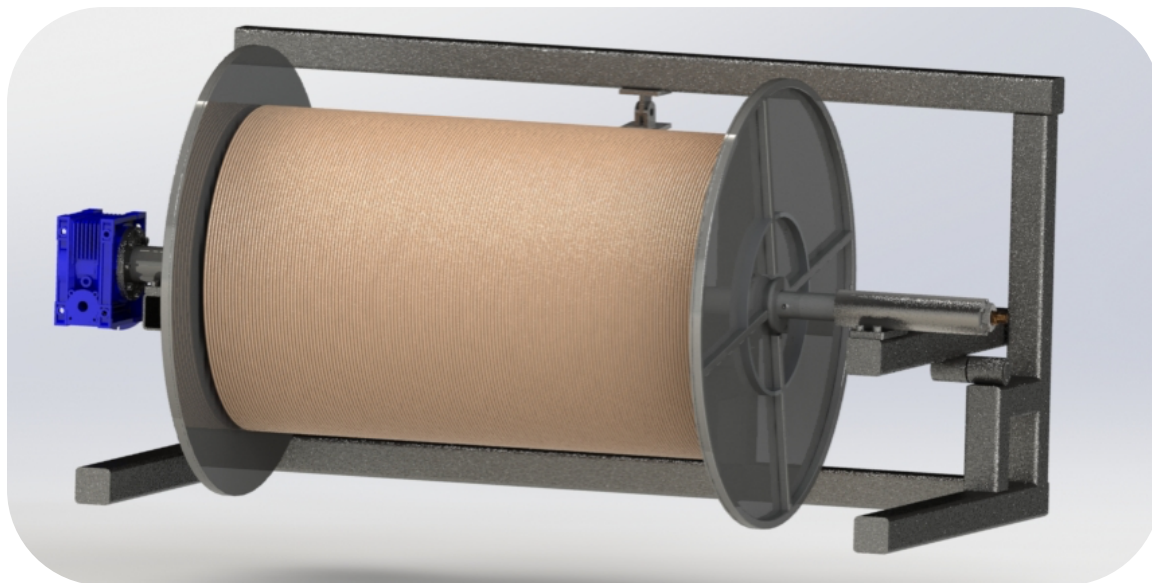
High speed wear-resistance **time belt**

pneumatic clamp

The force of haul-off & clamping is balanced, with high speed haul-off speed and good stability.

11. Coiling Machine

1set



- Coiling range Φ8-16mm
- Motor type 3Kw Electrogen A.C Motor Power
- Driver Brand 4Kw “China Made” Delta Brand C2000
- Frequency Inverter “China Made” Delta Brand
- Control system “China Made” Delta PLC control, equipped with tension controller

12.Delta PLC Control system

1unit

- Brand “China Made” Delta PLC
- Built-in the whole line precision synchronous control functional module
- Colorful Screen 10.5inch Screen
- Flexible rotary arm Included Freely adjustable, Which is easy for operation.
- Function ①**Synchronous control** of Extruder and the downstream

equipment, such like Gravimeter system, Haul-off Machine, etc.

② **Intelligent and Easy to learn**, Kind of information such as temperature, electricity, speed, melting pressure etc. can show on the screen, easier to learn for the operator.

③ **Alarm Reminder**, Programmable and settable alarming and protection function at all levels.

PART4 TECHNICALPARAMETER

Production Scope	Φ8-16mm
Production speed	20m/min for 8/5mm,20m/min for 14/10mm
Cooling water temperature	10-20°C
Haul-off speed	≤100 m/min
Coiling Speed	≤120 m/min
Package	Φ14×2.0mm ≤3000m/coils
Installed Nominal Power	140KW/h
Actual Power	70-80KW/h
Normal Water consumption m ³ /24h (Circulating water)	0.02-0.03 (Natural evaporation, pipeline leakage)
Air consumption m ³ /h	1.5
Production Line (LxWxH)	40000mm x 2500mmx 3000mm
Container Loading	1X40GP

PART5 SPAREPARTSLIST(Reference)

No.	Name	Specification	Quantity
1	Ceramic heater heating ring	For Mouth die/ For Flange /Connection neck	some
2	Fast acting fuse seat	RT18-32	5
3	Fast acting fuse	25A	10
4	Double ended spanner	6*8、8*10、12*14、14*17、17*1、 22*24	Each 1 per size
5	Adjustable spanner	0-250mm	1
6	Allen wrench	5、6、8、10、12、14、17	Each 1 per size
7	Heating ring plugs	ART/727	5
8	High temperature cable	4mm ²	5m
9	Solid State Relay	MGR-1 D4840	5
10	Solid State Relay	MGR-1 D4825	5
11	Schneider Midget Relay	RXM4LB/BD-24V-6A/3A	Each 5 per size
12	Schneider A.C contactor	CJX2-0910	5

13	Silicon Rubber Board	3mm	2m ²
14	PU Pipe	Ø8	5m
15	Rapid Plug	Ø8 End connector、 Angle connector、 Tee joint	Each 10 per type
16	Brass ball valve	1/4"	10
17	Stainless steel ball valve	1/2"	2
18	25 Sprayer		20
20	Seal strip for cooling tank		0.2m ²

The above spare parts are enough for two years in normal use

PART6 INSTALLATION & TRAINING STAFF

1. The warranty period is valid for 12 months from the date of delivery. The freight fee of subsequent fitting is charged by buyer. The seller can supply technology guide and consultation by telephone or Email.
2. Before our technician coming, please let your worker to learn the machine manual first, and also get water, electric, compressed air source, related tools and machine layout ready according to our layout drawings or photos.
3. The acceptance of machine will be carried out at the seller's factory.